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Report to the Chairman, Committee on
Armed Services, House of
Representatives

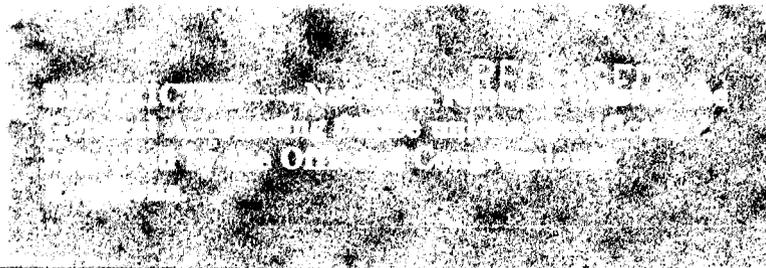
March 1991

NAVAL SAFETY
SCHOOL RELOCATION

More Credible Cost
Analysis Is Needed



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United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-242918

March 22, 1991

The Honorable Les Aspin
Chairman, Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

As you requested, we reviewed the Secretary of the Navy's decision to relocate the Naval Safety School from Bloomington, Indiana, to Norfolk, Virginia. You also asked us to assess the impact of the transfer on safety training in the Navy. In February 1990, the Secretary announced that he had concluded that the proposed relocation would benefit the operating forces and achieve long-term cost savings. His conclusion was based on a review by the Chief of Naval Education and Training.

Results in Brief

The Navy's cost analysis is flawed and has not been updated to reflect recent changes in the Navy's relocation plans. Furthermore, the benefits cited in the Chief's report are speculative. The Navy has no plans to correct and update the cost analysis before it proceeds with the relocation, which is currently expected to be no earlier than June 1991.

As with any relocation, there is likely to be some temporary adverse impact, but with present cost uncertainties, recent expansion of the School's mission, and the possibility of a contractor change, a reliable assessment of the relocation impact on safety training for the Navy cannot be made at this time.

Background

The School is responsible for developing, scheduling, and reviewing courses and instructional materials dealing with occupational safety and health topics. Currently, the School has an authorized staff of eight federal civilian employees. Almost all the training courses for which the School is responsible are instructed by contractor personnel.

Indiana University, located in Bloomington, Indiana, is the present instruction contractor. The University operated under a competitively negotiated contract awarded in November 1985 until August 30, 1990, when a new \$1,108,581 contract became effective. The new contract was awarded noncompetitively to cover the year it might take to solicit competitive proposals and award another multiple-year contract. The

current contract calls for presenting 73 courses, representing an estimated 19,055 student days. Only a portion of the courses will be conducted in Bloomington or Norfolk, as indicated in table 1.

Table 1: Training Projected for Year Beginning September 1990

Location	Courses		Students Days	
	Number	Percent	Days	Percent
Bloomington, Ind.	18	24.7	4,621	24.2
San Diego, Calif.	13	17.8	3,082	16.2
Norfolk, Va.	12	16.4	3,050	16.0
Charlestown, Ind.	5	6.9	1,320	6.9
Jacksonville, Fla.	3	4.1	775	4.1
Port Hueneme, Calif.	3	4.1	720	3.8
Gulfport, Miss.	2	2.7	720	3.8
Pearl Harbor, Hawaii	2	2.7	920	4.8
To be announced	4	5.5	800	4.2
11 other locations	11	15.1	3,047	16.0
Total	73	100.0	19,055	100.0

The School's staff is collocated with the contractor's personnel in about 9,100 square feet of office space that the Navy leases from the University under a separate contract. The lease is scheduled to expire in September 1992, somewhat more than a year after the term of the current instruction contract. Rent-free use of some similar space probably will be made available to the successor contractor in the Norfolk area if the School is relocated as planned.

In January 1990, the Navy planned to relocate the School into a barracks style facility, Building A-67, on the Norfolk Naval Base. However, later in the year, the Navy found that renovation of Building A-67 would cost about three times what had been estimated, and a new site—Building SP-17— was selected. Building SP-17 is the bachelor officers' quarters for the Norfolk Naval Air Station. A two-story section in the rear of the center wing of this building, an area that once served as the galley, is where the Navy now plans to house the School. The second story is currently being used as offices and classrooms by a college that is scheduled to move to another location on the Base; the first floor is being used for miscellaneous storage. Some renovation of Building SP-17 will be necessary when it is vacated, but the nature of that renovation has not been settled. The possibility also exists that the renovations will delay occupancy, and the School will have to be housed in another, much smaller building on the Base until 1992.

Cited Benefits Uncertain and of Questionable Value

The Chief pointed to cost savings and other factors in recommending approval to relocate the School from Bloomington to Norfolk. For the reasons cited below, we believe that the cost savings are uncertain and that other cited benefits are too speculative.

Cost Savings

In his January 1990 report, the Chief cited a cost analysis that projected a nonrecurring relocation expense of \$766,900 offset by an annually recurring savings of \$138,500, resulting in a 5.5 year payback.

This cost analysis is out-of-date and flawed in a number of significant ways, as the following examples show.

- The analysis contained at least two computational errors, which if taken into account would have resulted in an upward adjustment of the relocation expense to \$771,900 and an annual savings of only \$51,200, extending the payback period to 15 years.
- The analysis should have followed discounting procedures prescribed by Office of Management and Budget Circular A-94 that are designed to take into account the time value of investment costs. Had the Navy followed these procedures, an analysis would have shown that less than 70 percent of the \$771,900 relocation expense would be paid back in 50 years.

These and other aspects of the cost analysis are discussed in appendix I.

In November 1990, a \$440,774 estimate was prepared reflecting the cost to renovate Building SP-17. Action on the November estimate is still pending, but it seems clear that the renovation cost will probably continue to be a dominant feature in any economic analysis of the proposed relocation.

At the beginning of our review, Navy officials acknowledged that the cost analysis contained some errors and that it no longer reflected current expectations, but they told us that no effort would be made to correct or update the cost analysis before proceeding with relocation. When we discussed our findings with these officials at the conclusion of our field work in January 1991, they told us that they could redo the cost analysis in a more credible fashion before proceeding with the relocation, but they indicated that they were still not committed to do so.

Other Factors

In addition to citing the cost analysis, the Chief recommended relocation

...based on the benefit to the operating forces and the following considerations:

- a. Providing afloat safety training in an area of fleet concentration will contribute to user acceptance of the expanded role of the school beyond providing traditional industrial safety training.
- b. Increased responsiveness to fleet training requirements.
- c. Stability of the school by locating in Navy-owned space not controlled by the instructional delivery contractor.
- d. Increased coordination between major elements of the Navy Safety program (e.g. the Naval Safety Center and Naval Environmental Health Center are both located in the Norfolk area).

The benefit to the operating forces was explained to us as being the projected result of expanding the School's mission to embrace the Navy's operational, or afloat, environment. The industrial, or ashore, setting has been the more traditional focus of the School. The School's Director said that broadening this focus will involve reviewing the accuracy of the technical content of afloat courses and instructional materials rather than developing or presenting new or replacement courses or materials.

These latter functions, he said, will remain the responsibility of the fleet training centers and similar organizations. Expanding the function of the School in this way could be beneficial, but the Navy has not demonstrated that achievement of the beneficial effects depends on where the School is located.

In response to our question about how the Navy estimated the value of the other considerations cited by the Chief, the Navy's spokesperson characterized the listed factors as subjective, reflecting the management opinion of various Navy officials and staffs.

Conclusions and Recommendations

The Navy's cost analysis is flawed and outdated; the other factors cited in justification for the relocation are speculative, and the Navy has not demonstrated that achievement of the School's expanded mission objectives are dependent on where it is located. It seems evident that relocation of the School will entail a significant, immediate expenditure. In our

opinion, the analysis of costs and any other benefits should be redone before the relocation proceeds.

Therefore, we recommend that the Secretary of the Navy direct that the Chief of Naval Education and Training redo his analysis of costs and benefits before implementing any plans to relocate the Naval Safety School.

Scope and Methodology

Our objective in this review was limited to selectively testing the accuracy, currency, and sufficiency of factors underlying the decision the Secretary announced in February 1990.

We accomplished our objective principally by examining pertinent documentation and interviewing Navy and contractor personnel. Most of our field work was done in Washington, D.C., but we did visit the School in Bloomington and examine the space in Building SP-17 in Norfolk.

Our review was performed from August 1990 through January 1991 in accordance with generally accepted government auditing standards. As requested, we did not obtain written agency comments. However, we did obtain the views of responsible agency officials during the course of our work. In general, these officials did not dispute the factual basis on which our conclusions are based, and they acknowledged the action we recommend would be feasible.

As agreed with your office, we plan no further distribution of this report until 1 day after its issue date. At that time we will send copies to Congressmen Lee Hamilton, Frank McCloskey, and John Myers; other interested congressional committees; and the Secretary of the Navy.

Patrick S. Donahue, Assistant Director, Navy Issues, was the major contributor to the report. Please contact me on (202) 275-6504 if you or your staff have any questions concerning this report.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Martin M. Ferber". The signature is fluid and cursive, with the first name "Martin" being the most prominent.

Martin M Ferber
Director, Navy Issues

Uncertain Aspects of the Navy's Cost Analysis

Dollars in thousands			
Item	Annual recurring cost		Nonrecurring cost
	Indiana	Norfolk	
Facilities Lease	\$(93.5)		
Renovation ^a			\$443.2
Equipment			12.0
Utilities		\$19.0	
Operations			
Nine civilian salaries	(322.0)	322.0	
One officer salary ^b	(87.3)	87.3	
Instructor contract	(659.5)	659.5	
Staff travel	(26.0)	26.0	
Consumables	(2.0)	2.0	
Publications		5.0	
Student travel	(121.7)	98.4	
Student per diem ^c	(295.5)	337.1	
Moving expense			
Eight civilians ^d			293.1
One officer ^e			9.6
Equipment vans			12.0
Equipment packing ^f			2.0
Double entry ^g	(87.3)		
Arithmetic error ^h			(5.0)
Totalⁱ	\$(1,694.8)	\$1,556.3	\$766.9

^aThe initial estimate for Building A-67 was revised upward in June 1990 from \$443,200 to \$1,300,000. When Building SP-17 was later selected as a substitute, only minimal renovation costs were anticipated. However, a cost estimate in November 1990 put the SP-17 renovation cost at \$440,774; authorization of a renovation as extensive as called for in the November estimate seems unlikely because funding may not be available.

^b Contrary to an assumption on which the cost analysis was based, the Navy no longer anticipates that an officer will be stationed in Bloomington before the relocation is accomplished. (See note e).

^cThe \$337,122 figure is overstated by \$67,615 because it includes per diem for 71 students who would be ineligible for such compensation because they are expected to be residents in the Norfolk area.

^dThe Director of the Safety School said that there may only be one civilian that elects to continue as an employee of the School if the relocation takes place. Employees probably will not have to decide before June 1991. Accordingly, it is difficult to conclude that this amount is correctly estimated.

^eThis represents a \$9,565 overstatement because the assumption on which it was based is no longer valid. See note b; the Navy will have no officer in Bloomington to relocate.

^fThe underlying assumption is that it will require a total of six vans to transport the School's equipment from Bloomington to Norfolk and that the cost to load and unload each van will be \$1,000. Accordingly, this item is understated by \$4,000 in the Navy's cost analysis.

^gThis is a computational error in the Navy's cost analysis, which results in an \$87,300 overstatement of annual cost savings in Bloomington. This is a double entry of the officer salary discussed in note b. This

**Appendix I
Uncertain Aspects of the Navy's
Cost Analysis**

and the error discussed in note h collectively represent the computational errors discussed in the report.

^bThis error in the Navy's cost analysis results in a \$5,000 understatement of the anticipated expense of the relocation.

^cIn arriving at a 5.5 year payback, the Navy simply divided the \$766,900 in nonrecurring expense by the net annual savings, \$138,500—the difference between the totals of the first two columns. Circular A-94 calls for discounting the projected annual savings. If that had been done, payback would not occur until almost 8 years after the \$766,900 relocation cost was incurred, as shown in table I.1:

Table I.1: Effect of Discounting

Year	Net annual savings	Midyear discount factor	Discounted savings	Expense recovery
0	0		0	\$(766,900)
1	\$138,500	0.953462	\$132,054	(634,845)
2	138,500	0.866784	120,050	(514,796)
3	138,500	0.787986	109,136	(405,660)
4	138,500	0.716350	99,214	(306,445)
5	138,500	0.651228	90,195	(216,250)
6	138,500	0.592025	81,995	(134,255)
7	138,500	0.538205	74,541	(59,713)
8	138,500	0.489228	67,765	8,051

As pointed out on page 3, when the net annual savings is reduced from \$138,500 to \$51,200 to reflect correction of computational errors, the discounted savings pay back only a fraction of the investment after 50 years.



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